

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 March 2005 (03.03.2005)

PCT

(10) International Publication Number
WO 2005/018794 A1

(51) International Patent Classification⁷: B01J 13/04,
A23L 1/00

Queens Avenue, Dorchester, Dorset DT1 2EP (GB). TSE,
Kathryn, Louise [NZ/DK]; Ved Amagerport 2, 2. TV,
DK-2300 København S (DK).

(21) International Application Number:
PCT/GB2004/003406

(74) Agents: ALCOCK, David et al.; D. Young & Co., 120
Holborn, London EC1N 2DY (GB).

(22) International Filing Date: 6 August 2004 (06.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

0319817.3	22 August 2003 (22.08.2003)	GB
60/497,409	22 August 2003 (22.08.2003)	US
0323335.0	6 October 2003 (06.10.2003)	GB
60/533,053	30 December 2003 (30.12.2003)	US
60/560,270	8 April 2004 (08.04.2004)	US
10/820,147	8 April 2004 (08.04.2004)	US

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (for all designated States except US):
DANISCO A/S [DK/DK]; Langebrogade 1, PO Box
17, DK-1001 Copenhagen K (DK).

(72) Inventors; and

(75) Inventors/Applicants (for US only): COYNE, Bob
[US/US]; 9209 Allman, Lenexa, KS 66219 (US).
FARAGHER, John [US/US]; 3639 E. Cleffe Drive,
Richfield, WI 53076 (US). GOUIN, Sébastien [CA/DK];
Tjorvaldsensgade 30, 6TV, DK-8000 Århus (DK).
HANSEN, Crasten, Bjørn [DK/DK]; Svanesmindevej
1, Esby, DK-8420 Knebel (DK). INGRAM, Richard
[GB/GB]; 3 Athelney Way, Yeovil, Somerset BA21 3TN
(GB). ISAK, Torben [DK/DK]; Birkhøj 79, DK-8382
Hinnerup (DK). THOMAS, Linda, Valerie [GB/GB]; 57

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: MICROCAPSULES

(57) Abstract: The present invention relates to microcapsules, and more particularly to microcapsules where an aqueous bead or beads comprising the active ingredient is encapsulated in or by a hydrophobic shell matrix. The present invention relates also to novel methods for preparing the microcapsules according to the invention, as well as to the use of the microcapsules of the present invention. A microcapsule of the present invention comprises a solidified hydrophobic shell matrix, an encapsulated aqueous bead or beads which is/are encapsulated in or by the solidified hydrophobic shell matrix, and an active ingredient or active ingredients dissolved or incorporated in the encapsulated aqueous bead or beads.

WO 2005/018794 A1